

# **EXHIBIT 3**

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Sir:

Transmitted herewith for filing is the patent application of

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George Winfield Treese and David K. Gifford

Title: INTERNET SERVER ACCESS CONTROL AND MONITORING SYSTEMS

☒ Specification, Claims, Abstract of the Disclosure  
☒ 7 sheets of ~~XXXXX~~/informal drawings. (Figs. 1-6.)

☐ An assignment of the invention to \_\_\_\_\_

☐ A verified statement to establish small entity status under 37 C.F.R. 1.9 and 37 C.F.R. 1.27.

☒ ~~Executed~~/Unexecuted Combined Declaration/Power of Attorney.

☐ Other: \_\_\_\_\_

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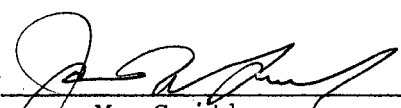
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INDEP CLAIMS	11 - 3 =	* 8	X 38 =	\$	X 76 =	\$ 608
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENTED			+120 =	\$	+240	\$
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Respectfully submitted,

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CLAIMS

What is claimed is:

1. A method of processing service requests from a client to a server system through a network comprising:  
 5 forwarding a service request from the client to the server system; and  
 appending a session identifier to the request and subsequent service requests from the client to the server system within a session of requests.

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 10 2. A method of processing service requests from a client to a server system through a network comprising:  
 forwarding a service request from the client to the server system;  
 15 returning a session identifier from the server system to the client; and  
 appending the session identifier to the request and subsequent service requests from the client to the server system within a session of requests.

3. A method as claimed in claim 2 wherein the session identifier includes a user identifier.

3 4. A method as claimed in claim 2 wherein the session identifier includes an expiration time for the session.

4 5. A method as claimed in claim 2 wherein the server system records information from the session identifier in a transaction log in the server system.

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6. A method as claimed in claim 5 wherein the server system tracks the access history of sequences of service requests within a session.
- 5 <sup>6</sup>~~7~~. A method as claimed in claim <sup>5</sup>~~6~~ wherein the server system tracks the access history to determine service requests leading to a purchase made within the session of requests.
- 10 <sup>7</sup>~~8~~. A method as claimed in claim <sup>4</sup>~~5~~ wherein the server system counts requests to particular services exclusive of repeated requests from a common client.
- <sup>8</sup>~~9~~. A method as claimed in claim <sup>4</sup>~~5~~ wherein the server system maintains a data base relating customer information to access patterns.
- 15 <sup>9</sup>~~10~~. A method as claimed in claim <sup>8</sup>~~9~~ wherein the information includes customer demographics.
- 20 11. A method as claimed in claim 2 wherein communications between the client and server system are according to hypertext transfer protocol and the session identifier is appended as part of a path name in a uniform resource locator.
- <sup>10</sup>~~12~~. A method as claimed in claim <sup>1</sup>~~2~~ wherein the server system assigns the session identifier to an initial service request to the server system.
- 25 <sup>11</sup>~~13~~. A method as claimed in claim <sup>1</sup>~~2~~ wherein the server system subjects the client to an authorization routine prior to issuing the session identifier and the session identifier is protected from forgery.

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14. A method as claimed in claim 13 wherein the server system comprises plural servers including an authentication server which provides session identifiers for service requests to multiple servers.

5 <sup>13</sup> ~~15~~. A method as claimed in claim <sup>12</sup> ~~14~~ wherein:

a client directs a service request to a first server which is to provide the requested service;

the first server checks the service request for a session identifier and only services a service request having a valid session identifier, and where the

10 service request has no valid identifier:

the first server redirects the service request from the client to the authorization server;

the authorization server subjects the client

15 to the authorization routine and issues the session identifier to be appended to the service request to the first server;

the client forwards the service request appended with the session identifier to the first

20 server; and

the first server recognizes the session identifier and services the service request to the client; and

the client appends the session identifier to

25 subsequent service requests to the server system and is serviced without further authorization.

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16. A method as claimed in claim 13 wherein the session identifier includes a user identifier.

17. A method as claimed in claim 13 wherein the session identifier includes an expiration time for the

30 session,

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18. A method as claimed in claim 13 wherein the session identifier provides access to a protected domain to which the session has access authorization.

<sup>17</sup>  
~~19.~~ A method as claimed in claim <sup>16</sup>~~18~~ wherein the session identifier is modified for access to a different protected domain.

*Sub 4* > 20. A method as claimed in claim 13 wherein the session identifier provides a key identifier for key management.

10 21. A method as claimed in claim 13 wherein the server system records information from the session identifier in a transaction log in the server system.

15 22. A method as claimed in claim 13 wherein communications between the client and server system are according to hypertext transfer protocol and the session identifier is appended as part of a path name in a uniform resource locator.

20 23. A method as claimed in claim 22 wherein the client modifies the path name of a current uniform resource locator using relative addressing and retains the session identifier portion of the path name unmodified for successive requests in a session.

25 24. A method as claimed in claim 2 wherein:  
the server system subjects the client to an authorization routine prior to issuing the session identifier and the session identifier is protected from forgery, records information from the session identifier in a transaction log in the server system, tracks request paths relative to hypertext pages, and maintains a data base relating customer demographics to access patterns;

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communications between the client and server system are according to hypertext transfer protocol;

the session identifier is appended as part of a path name in a uniform resource locator; and

5 the client modifies the path name of a current uniform resource locator using relative addressing and retains the session identifier portion of the path name unmodified for successive requests in a session.

25. A method of processing service requests from a client  
10 to a server system through a network comprising:  
responding to requests for hypertext pages received from a client through the network by returning the requested hypertext pages to the client;  
responding to further client requests related to  
15 links in the hypertext pages; and  
tracking the further client requests related to a particular hypertext page.

<sup>23</sup>  
<sup>22</sup>  
26. A method as claimed in claim <sup>22</sup>25 wherein the requests  
include a common session identifier and the server  
20 system tracks client requests within a session of requests.

*Sub B3*  
27. A method of processing service requests from a client  
to a server system through a network comprising  
responding to requests for documents received from the  
client through the network by returning the requested  
documents wherein the documents are customized for a  
particular user based on a user profile.  
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28. A method of processing service requests from a client  
to a server system through a network comprising:  
30 responding to a request for a document received from the client through the network;

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appending a session identifier, which includes a user identification, to the request; and

returning the requested document wherein the document is customized for a particular user based on the user identification of the session identifier.

29. A method of processing service requests from a client to a server system through a network comprising:

responding to requests for information received from the client through the network by returning the requested information to the client; and

counting requests to particular information exclusive of repeated requests from a common client.

30. A method as claimed in claim 29 comprising excluding requests made to information from the client within a defined period of time.

31. A method of processing service request for a document received from a client through network in which the document has been purchased by a user comprising:

responding to a request for a document received from a client through the network in which the document has been purchased by the user;

appending an authorization indicator to the request; and

returning the requested document if the authorization identifier indicates that the user is authorized to access the document.

32. A method as claimed in Claim 31, wherein the authorization identifier is encoded within a session identifier which is appended to the request.

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33. A method of processing service requests from a client to a server system through a network comprising:  
 responding to a request for a document received from a client through the network;  
 5 appending a user identifier to the request;  
 returning the requested document to the client, and;  
 charging the user identified in the identifier for access to the document.

10 <sup>31</sup> 34. A method as claimed in Claim <sup>30</sup> 33, wherein a user identifier is encoded within a session identifier which is appended to the request.

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15 35. An information system on a network comprising:  
 means for receiving service requests from clients and for determining whether a service request includes a session identifier;  
 means for providing the session identifier in response to an initial service request in a session; and  
 20 means for servicing service requests from a client which include the session identifier, the subsequent service request being processed as a session.

<sup>33</sup> 36. An information system as claimed in claim <sup>32</sup> 35 wherein the means for providing the session identifier is in a server system which services the requests.  
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30 37. An information system as claimed in claim 36 further comprising an authorization routine for authorizing the client prior to issuing the session identifier and means for protecting the session identifier from forgery.

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<sup>35</sup>~~38.~~

An information server system as claimed in claim <sup>32</sup>~~35~~ further comprising a transaction log for recording information from the session identifier.

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39. An information system as claimed in claim 38 further comprising means for tracking access history of sequences of service requests within a session.

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40. An information system as claimed in claim 37 further comprising means for counting requests to particular services exclusive of repeated requests from a common client.

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41. An information system as claimed in claim 38 further comprising a data base relating customer information to access patterns.

<sup>39</sup>~~42.~~

An information system as claimed in claim <sup>38</sup>~~41~~ wherein the information includes customer demographics.

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43. An information system as claimed in claim 35 wherein communications between the client and server system are according to hypertext transfer protocol and the session identifier is appended as part of a path name in a uniform resource locator.

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44. An information server on a network comprising:  
     means for responding to requests for hypertext pages received from a client through the network by returning the requested hypertext pages to the client;  
     means for responding to further request derived from links in the hypertext pages; and  
     means for tracking the further requests derived from a particular hypertext page.

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<sup>41</sup>  
~~45.~~

A server as claimed in claim <sup>40</sup>~~44~~ wherein the requests include a common session identifier and the server tracks requests within a session of requests.

<sup>42</sup>  
~~46.~~

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A server as claimed in claim <sup>41</sup>~~45~~ further comprising a data base relating customer demographics to access patterns.

<sup>47.</sup>

An information server on a network comprising:  
means for responding to requests for service received from a client through a network by returning the requested service to the client; and  
means for counting requests to particular service exclusive of repeated requests from a common client.

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<sup>44</sup>  
~~48.~~

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A server as claimed in claim <sup>43</sup>~~47~~ wherein the requests include a common session identifier and the server tracks requests within a session of requests.

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~~49.~~

A server as claimed in claim <sup>43</sup>~~47~~ further comprising means for excluding requests made to a service from the client within a defined period of time.

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